## In the Claims:

- (Currently Amended) A method for discriminating p16<sup>INK4a</sup> overexpressing metaplasias from p16<sup>INK4a</sup> overexpressing neoplastic or preneoplastic dysplastic lesions in a biological uterine cervix sample in the course of cytological testing procedures comprising:
  - a. determining the presence or absence of cells overexpression of p16<sup>INK4a</sup> in said biological sample;
  - b. determining the presence or absence of cells expressing at least one high risk HPV gene-product in said biological sample, wherein the high risk HPV gene-product is a polypeptide; and
  - c. assessing simultaneous presence of cells expressing the high risk HPV geneproducts with gene-product and cells overexpressing p16<sup>INK4a</sup>, or the presence of cells overexpressing p16<sup>INK4a</sup> alone;

wherein the simultaneous presence of cells expressing the high risk HPV gene-products with gene-product and cells overexpressing p16<sup>INK4a</sup> is indicative for of neoplastic or preneoplastic dysplastic lesion, and the presence of cells overexpressing p16<sup>INK4a</sup> alone is indicative of metaplasias.

- (Currently Amended) The method according to claim 1, wherein the high risk HPV
  gene-products are predominantly gene-product is expressed in early neoplastic and/or
  preneoplastic dysplastic lesions.
- 3. (Currently Amended) The method according to claim 1, wherein at least one of the <u>high</u> risk HPV gene-products gene-product is encoded by the HPV E7 gene.
- 4. (Withdrawn-Currently Amended) The method according to claim 1, wherein at least one of the high risk HPV gene-products gene-product is encoded by HPV E2 and/or E6 genes.
- 5. (Withdrawn-Currently Amended) The method according to claim 1, wherein at least one of the high high risk HPV gene-products gene-product is encoded by HPV L1 and/or L2 genes.

- 6-7. (Cancelled)
- 8. (Currently Amended) The method according to claim [[7]] 1, wherein the neoplastic or dysplastic lesion of the anogenital tract is a lesion of the uterine cervix.
- 9-10. (Cancelled)
- 11. (Currently Amended) The method according to claim 10 1, wherein the biological sample is a Pap-smear Pap smear or a cytological preparation of the cervix uteri.
- 12. (Previously Presented) The method according to claim 1, wherein the detection of the HPV gene-products and of p16<sup>INK4a</sup> is performed using one or more probes specific for the HPV gene-products and p16<sup>INK4a</sup>.
- 13, (Previously Presented) The method according to claim 12, wherein the probe is detectably labelled.
- 14. (Previously Presented) The method according to claim 13, wherein the label is selected from the group consisting of a radioisotope, a bioluminescent compound, a chemiluminescent compound, a fluorescent compound, a metal chelate, or an enzyme.
- 15. (Currently Amended) The method according to claim 12, wherein the probe is a polypeptide and/or a nucleic acid.
- 16. (Previously Presented) The method according to claim 15, wherein the probe is an antibody directed against a high risk HPV encoded gene-product or p16<sup>INK4a</sup>.
- 17. (Original) The method according to claim 16, which comprises an immunocytochemical staining procedure.
- 18-21. (Cancelled)
- 22. (Currently Amended) The method according to Claim 15, wherein detection of the <u>high-risk HPV gene-products</u> gene-product and p16<sup>INK4a</sup> is carried out using nucleic acid probes and polypeptide probes simultaneously.

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- 23. (Currently Amended) The method according to claim 1, wherein the high risk HPV gene-products are gene-products gene-product is gene-product of the cancer associated HPV subtypes HPV 16, 18, 31, 33, 35, 39, 45, 51, 52, 56 or 58.
- 24. (Currently Amended) The method according to claim 1, wherein overexpression of p16<sup>INK4a</sup> simultaneous to and expression of at least one high risk HPV gene-products gene-product is simultaneous determined in at least one single cell is determined.

## 25-26. (Cancelled)

27. (New) The method according to Claim 1, wherein the presence or absence of cells overexpression of p16<sup>INK4a</sup> and the presence or absence of cells high risk HPV gene-product is determined on a slide preparation.